Claims

1. Method, at a draw frame for fibre slivers, of adjusting the nip line spacing of a drawing mechanism, which has at least two drawing mechanism roller combinations, of which at least one is so mounted that it can be adjusted, wherein each drawing mechanism roller combination consists of at least one driven lower roller and at least one upper roller (press roller) lying, in operation, on top of the lower roller and so mounted that it can be lifted off, characterised in that, with fibre slivers inserted,

a) the upper rollers are unloaded or lifted off,

b) the mountings of at least one lower roller are unlocked,

c) the mountings are adjusted to the desired nip line spacing using a displacement device,

d) the mountings are subsequently re-locked.

2. Method according to claim 1, characterised in that the transport rollers are lifted off.

3. Method, at a draw frame for fibre slivers, of adjusting the nip line spacing of a drawing mechanism, which has at

least two drawing mechanism roller combinations, of which at least one is so mounted that it can be adjusted, wherein each drawing mechanism roller combination consists of at least one driven lower roller and at least one upper roller (press roller) lying on top of the lower roller and so mounted that it can be lifted off, characterised in that, with fibre slivers inserted and upper rollers loaded,

a) the mountings of at least one lower roller are unlocked,

b) the mountings are adjusted to the desired nip line spacing using a displacement device,

c) the mountings are subsequently re-locked,

a loop of fibre material formed in a draft zone being drawn straight (evened out).

4. Method according to claim 3, characterised in that the preliminary or main draft zone spacing is reduced and, simultaneously or subsequently, the loop of fibre material in the main draft zone is drawn straight (evened out).

5. Method according to claim 3, characterised in that the loop of fibre material is evened out by rotation of the delivery roller combination in the work direction (A).

6. Method according to claim 3, characterised in that a loop of fibre material is formed in the main draft zone and, subsequently or simultaneously, the preliminary or main draft zone spacing is increased.

7. Method according to claim 3, characterised in that the loop of fibre material is formed by rotation of the delivery roller combination contrary to the work direction (B).

8. Method according to claim 1, characterised in that the transport rollers are loaded.

9. Method according to claim 1, characterised in that, in the case of one drawing mechanism and a plurality of draft zones, adjustment of the nip line spacings is carried out in continuation from one draft zone to another.

10. Apparatus at a draw frame having a drawing mechanism for the doubling and drafting of fibre slivers, having a drawing mechanism frame for accommodating the drawing mechanism, which

has at least two pairs of rollers each comprising an upper roller and a lower roller, having means for adjusting the spacing of at least one of the lower rollers in relation to another lower roller, in each case having a mounting device for accommodating the lower roller, wherein lower rollers are arranged to be driven by at least one drive element endlessly revolving around pulley wheels, characterised in that at least one pulley wheel (40, 41, 42, 43, 44, 45, 46; 51) and the tensioned drive element (47) are used for adjusting the mounting device (33a, 33b; 34a, 34b; 35a, 35b; 36a, 36b), wherein a moving force applied to the pulley wheel (40, 41, 42, 43, 44, 45, 46; 51) or to the drive element (47) can be converted into the adjusting movement for the mounting device (33a, 33b; 34a, 34b; 35a, 35b; 36a, 36b).

11. Apparatus according to claim 10, characterised in that the drive element is stationary and the pulley wheel is rotated.

12. Apparatus according to claim 10, characterised in that the pulley wheel is stationary and the drive element is moved.

13. Apparatus according to claim 10, characterised in that at least one guide pulley wheel is attached to each slider (mounting); and the roller-driving pulley wheel or guide pulley wheel (s) act, in each case one after the other, on both sides of the tensioned drive element.

14. Apparatus according to claim 10, characterised in that the rotation of the pulley wheel or the movement of the drive element is accomplished manually.

15. Apparatus according to claim 10, characterised in that the slider is linearly displaceable.

16. Apparatus according to claim 10, characterised in that the drive element is a toothed belt.

17. Apparatus according to claim 10, characterised in that an endless flexible toothed belt is present.

18. Apparatus according to claim 10, characterised in that the pulley wheels comprise toothed belt wheels.

19. Apparatus according to claim 10, characterised in that the pulley wheels comprise guide pulley wheels.

20. Apparatus according to claim 10, characterised in that at least one driving pulley wheel is provided.

21. Apparatus according to claim 10, characterised in that driven pulley wheels are present.

22. Apparatus according to claim 10, characterised in that the drive element loops around the pulley wheels.

23. Apparatus according to claim 10, characterised in that the drive element and the pulley wheels are in engagement with one another.

24. Apparatus according to claim 10, characterised in that the pulley wheel for adjustment of a slider is the drive pulley wheel of a lower roller (roller-driving pulley wheel).

25. Apparatus according to claim 10, characterised in that the slider is displaceable during adjustment.

26. Apparatus according to claim 10, characterised in that the slider is arranged to be stopped.

27. Apparatus according to claim 10, characterised in that the stopping arrangement is releasable.

28. Apparatus according to claim 10, characterised in that a display device for the position of the slider is present.

29. Apparatus according to claim 10, characterised in that a drive motor is used for rotation of the pulley wheel.

30. Apparatus according to claim 10, characterised in that a drive motor is used for movement of the drive element.

31. Apparatus according to claim 10, characterised in that the drive motor is used for the lower rollers.

32. Apparatus according to claim 10, characterised in that a separate drive motor is used.

33. Apparatus according to claim 10, characterised in that belt shortening or belt lengthening is arranged to be automatically evened out during adjustment.

34. Apparatus according to claim 10, characterised in that the evening-out of belt length is carried out at a slider by two guide pulley wheels.

35. Apparatus according to claim 10, characterised in that the lower rollers are arranged to be adjusted singly and independently of one another.

36. Apparatus according to claim 10, characterised in that a roller-driving pulley wheel and a guide pulley wheel are attached to the slider of the intake roller and a roller-driving pulley wheel and a guide pulley wheel are attached to the slider of the middle roller.

37. Apparatus according to claim 10, characterised in that the drive element runs around the pulley wheels at the slider of the intake roller and around the pulley wheels at the slider of the middle roller in a mirror-reflected arrangement.

38. Apparatus according to claim 10, characterised in that the drive element is in tension before, during and after the displacement.

39. Apparatus according to claim 10, characterised in that the drive motor is in communication with an electronic control and regulation device.

40. Apparatus according to claim 10, characterised in that a measuring element is connected to the control and regulation device.

41. Apparatus according to claim 10, characterised in that the measuring element is capable of registering fibre-related and/or machinery-related measurement variables.

42. Apparatus according to claim 10, characterised in that adjustment of the slider is carried out when the draw frame is in operation.

43. Apparatus according to claim 10, characterised in that adjustment of the slider is carried out when the draw frame is not in operation.

44. Apparatus according to claim 10, characterised in that adjustment of the slider is carried out during can-changing.

45. Apparatus according to claim 10, characterised in that the draw frame is self-adjusting.

46. Apparatus according to claim 10, characterised in that adjustment of the slider is carried out by inputting adjustment variables.

47. Apparatus according to claim 10, characterised in that the adjustment variables can be input manually.

48. Apparatus according to claim 10, characterised in that a memory for adjustment variables is connected to the control and regulation device.

49. Apparatus according to claim 10, characterised in that the slider for the intake roller and the slider for the middle

roller are arranged to be connected by a rigid connecting element.

50. Apparatus according to claim 10, characterised in that the connecting element is releasably connected.

51. Apparatus according to claim 10, characterised in that the spacing of the pairs of rollers in relation to one another can be adjusted without fibre material.

52. Apparatus according to claim 10, characterised in that the spacing of the pairs of rollers in relation to one another can be adjusted with fibre material.

53. Apparatus according to claim 10, characterised in that the extent of the preliminary draft zone can be adjusted.

54. Apparatus according to claim 10, characterised in that the extent of the main draft zone can be adjusted.

55. Apparatus according to claim 10, characterised in that the extent of the preliminary draft zone and the extent of the main draft zone can be adjusted.

56. Apparatus according to claim 10, characterised in that each lower roller has its own associated drive motor.

57. Apparatus according to claim 10, characterised in that the intake and middle lower rollers are arranged to be driven by one drive motor.

58. Apparatus according to claim 10, characterised in that a brake, stopping arrangement or the like is associated with the stationary pulley wheel.

59. Apparatus according to claim 10, characterised in that a mechanical brake, stopping arrangement or the like is present.

60. Apparatus according to claim 10, characterised in that an electrical brake, stopping arrangement or the like is present.

61. Apparatus according to claim 10, characterised in that the drive motor is a self-braking motor.

62. Apparatus according to claim 10, characterised in that an electromagnetic brake, stopping arrangement or the like is present.

63. Apparatus according to claim 10, characterised in that the drive motor drives a further drive train, which has a free-wheel arrangement or the like.

64. Apparatus according to claim 10, characterised in that at least three drawing mechanism roller combinations are present, of which at least two are so mounted that they can be adjusted.

65. Apparatus according to claim 10, characterised in that the mounting device consists of the mounting (33a, 33b; 34a, 34b) and the slider (35a, 35b, 36a, 36b).

66. Apparatus according to claim 10, characterised in that the mounting (33a, 33b, 34a, 34b) and the slider (35a, 35b, 36a, 36b) are fastened to one another, for example by bolts.

67. Apparatus according to claim 10, characterised in that the mounting (33a, 33b, 34, 34b) and the slider (35a, 35b, 36a, 36b) are of integral construction.